

WHAT IS CLAIMED IS:

1. A method performed by a data processing system having a memory, comprising the steps of:
5 inputting a CCFG;
inputting an order of the CCFG nodes; and
translating the CCFG into an SCFG by a process that determines context switching prior to execution of the SCFG.

2. The method of claim 1, wherein each context switch is achieved by adding code that saves a state of a thread being suspended in a state variable and resumes another thread by performing a multiway branch on a state variable for a thread being resumed.
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3. The method of claim 1, wherein the translation of the CCFG into the SCFG produces, for each node of the CCFG, at most one corresponding node in the SCFG.
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4. The method of claim 1, further comprising a topological sort for determining the ACCFG order.
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5. The method of claim 1, wherein an execution of the SCFG comprises translation of the SCFG into a programming language.
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6. The method of claim 5, wherein the programming language is C.
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7. The method of claim 1, further comprising a step of translation of the SCFG into a programming language.
8. The method of claim 7, further comprising a step of executing the programming language translation of the SCFG.

9. The method of claim 1, wherein an execution of the SCFG comprises interpretation of the SCFG.

5 10. A data processing system having a memory, comprising the following:
a sub-system for inputting a CCFG;
a sub-system for inputting an order of the CCFG nodes; and
a sub-system for translating the CCFG into an SCFG by a process that determines context switching prior to execution of the SCFG.

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11. A computer program product comprising a computer usable medium having computer readable code embodied therein, the computer program product including:
computer readable program code devices configured to cause a computer to effect inputting a CCFG;
computer readable program code devices configured to cause a computer to effect inputting an order of the CCFG nodes; and
computer readable program code devices configured to cause a computer to effect translating the CCFG into an SCFG by a process that determines context switching prior to execution of the SCFG.

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12. A computer data signal embodied in a carrier wave and representing sequences of instructions which, when executed by a processor, cause performance of steps of:
inputting a CCFG;
inputting an order of the CCFG nodes; and
translating the CCFG into an SCFG by a process that determines context switching prior to execution of the SCFG.

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